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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,027	12/30/2003	Kevin J. Elsken	PO-8044/MD-02-39	8269

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BAYER MATERIAL SCIENCE LLC
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EXAMINER

COONEY, JOHN M

ART UNIT	PAPER NUMBER
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1711

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/749,027

Applicant(s)

ELSKEN ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 17-21, 23-32, 41-46 and 48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 17-21, 23-32, 41-46, and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11-21-06 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claims must further narrow the claim from which they depend.

Claims 2 and 26 are confusing as to intent because the employment of the transitional language "comprising" in defining the polyol component fails to further narrow the claim from which claims 2 and 26 depend.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 17-21, 23-32, 41-46, and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Schilling et al.(6,846,850).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Patentees disclose preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water (see each of the documents in their entirety). Patentees' disclosure is teaching of the instant polyol components and mixtures, HFC-245fa, and water to a degree that anticipation of applicants'

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combinations and their amounts is seen to be evident. The specific K-values of applicants' claims, though not particularly specified, are held to be inherent to patentees' teaching owing to the similarities in the materials employed.

The following arguments set forth previously in the Office action mailed 8-21-06 are maintained:

Rejection over Schilling et al.(6,846,850) is maintained because the affidavit evidence signed by Doerge, not a named inventor in the 6,846,850 patent, does not sufficiently show that the relevant disclosure is applicants' own work and that the invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another".

Applicants' latest arguments have been considered, but rejection is maintained for all of the reasons set forth above. Applicants' submitted affidavit evidence does not sufficiently meet the requirements for attribution necessary to overcome the rejection set forth above {see MPEP 716.10}. Though examiner does not see a means for this rejection to be overcome, such is not a grounds for withdrawing the rejection as the rejection has not been overcome.

Applicants' latest arguments have been considered, but rejection is maintained for the reasons set forth above. Applicants' claims as they currently stand do not exclude the presence of sorbitol from their foam forming mixtures. The claims define "a polyol blend" as a component of their invention using the transitional language "consisting of". However, as the claims currently stand, other materials, including polyols, are not excluded by applicants' claims.

Claims 1-8, 17-21, 23-32, 41-46, and 48 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 03/089,505.

WO 03/089,505 discloses preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water (see the entire document). WO 03/089,505's disclosure teaches the instant polyol components and mixtures, HFC-245fa, and water to a degree that anticipation of applicants' combinations and their amounts is seen to be evident. The specific K-values of applicants' claims, though not particularly specified, are held to be inherent to the teachings of WO 03/089,505 based on the make-up of the materials employed.

The following arguments set forth previously in the Office action mailed 8-21-06 are maintained:

Applicants' arguments have been considered, but rejection is maintained as the affidavit evidence provided applies, only, to the patent referred to in the affidavit and can not be applied to overcome a rejection over another patent.

Applicants' latest arguments have been considered, but rejection is maintained for the reasons set forth above. Applicants' claims as they currently stand do not exclude the presence of carbon dioxide from their foam forming mixtures.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 17-21, 23-32, 41-46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lund et al.(5,688,833).

Lund et al. disclose preparations of polyurethane foams having lowered K-factors, superior performance and dimensional stability which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water (see column 1 lines 47-57, column 2 lines 10-25, column 3 lines 24 et seq., column 4 lines 15-24, and column 5 lines 6-29, as well as, the entire document). Lund et al. discloses employment of aromatic amine initiated polyols as the sole polyol and therefore difference based on the polyol component make-up is not seen for claims 1, 3-8, 25, and 27-32.

Lund et al. differs from applicants' claims in that it does not particularly recite specific ranges of amount values for its blends of polyol components. However, Lund et al. recites the employment of the specific polyols set forth in applicants' claims for the purpose of imparting their isocyanate reactive effects (see column 3 line 53 - column 4

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line 23). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed combinations of the polyols of Lund et al. in varied amounts within the teachings of Lund et al. for the purpose of imparting their isocyanate reactive effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves nor more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

Lund et al. differs from applicants' claims in that the amounts of HFC-245fa employed are not particularly limited to the ranges of values set forth by applicants' claims. However, Lund et al. discloses variation in the amounts of its HFC-245fa blowing agent for the purpose of controlling densities. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied amounts of the HFC-245fa within the teachings of Lund et al. for the purpose of controlling densities in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Again, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves nor more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of

ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

Applicants' latest arguments have been considered, but rejection is maintained for the reasons set forth above. Applicants' claims as they currently stand do not exclude the presence of additional components disclosed by Lund et al. from their foam forming mixtures. The claims define "a polyol blend" as a component of their invention using the transitional language "consisting of". However, as the claims currently stand, other materials, including polyols, are not excluded by applicants' claims.

Claims 1, 3-8, 25, 27-32, 41-46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP-0,822,171.

EP-0,822,171 disclose preparations of polyurethane foams which are prepared from aromatic amine initiated polyether polyols, polyisocyanates, and 1,1,1,3,3-pentafluoropropane(HFC-245fa)(see examples 20-38 as well as, the entire document).

EP-0,822,171 differs from applicants' claims in that the amounts of HFC-245fa employed are not particularly limited to the ranges of values set forth by applicants' claims. However, EP-0,822,171 discloses employment of HFC-245fa in foaming compositions for the purpose of imparting its blowing effect. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied amounts of the HFC-245fa within the teachings of EP-0,822,171 for the purpose of controlling foaming degrees within the products obtained in order to arrive at the products and processes of

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applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves no more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

The following arguments set forth previously in the Office action mailed 8-21-06 are maintained:

Applicants' arguments have been considered but rejection is maintained for the reasons set forth in the rejection above. Applicants' indication of examples containing elements of the claims is not seen to provide distinguishing evidence to overcome the rejection as set forth. Applicants have not provided evidence of differences based on composition of their invention as claimed to overcome the rejection as set forth.

Applicants' latest arguments have been considered, but rejection is maintained for the reasons set forth above. Examiner maintains the rejection as set forth above to be proper, and applicants have not demonstrated defects sufficient to rebut examiner's position.

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The following rejection is set forth in the alternative to the above rejection under 35 USC 102(e) over Schilling et al.(6,846,850).

Claims 1-8, 17-21, 23-32, 41-46, and 48 are rejected under 35 U.S.C. 103(a) as being obvious over Schilling et al.(6,846,850).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Schilling et al. disclose preparations of polyurethane foams based on mixing and reacting isocyanates, polyol premixes as claimed, HFC-245fa, and auxiliaries and additive (see the entire document).

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The Schilling et al. document differs from applicants' claims in that it does not particularly recite the specific ranges of amount values as claimed by applicants for their blends of polyol components. However, the Schilling et al. document does recite the employment of the specific polyols set forth in applicants' claims for the purpose of imparting their isocyanate reactive effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed combinations of the polyols of the Schilling et al. document in varied amounts within the teachings of the Schilling et al. document for the purpose of imparting their isocyanate reactive effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves no more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

Rejection is maintained for the reasons set forth above. Applicants' provided affidavit evidence is insufficient in overcoming the above rejection as indicated in the rejection under 35 USC 102 above. Applicants make no further arguments other than to reiterate the arguments regarding Schilling et al. set forth above. This reiteration is noted.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8, 17-21, 23-32, 41-46, and 48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,2,5,8, and 11-13 of copending Application No. 10/894,692, claims 1-9 of copending Application No. 10/965,349, claims 1-8 of copending Application No. 10/295,315, each taken individually. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims and the teaching effects of the supporting disclosure disclose preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of polyethers and polyesters, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water wherein it would have been obvious for one having ordinary skill in the art to have varied the combinations and their respective amounts within the claims of the applications with the expectation of success in order to arrive at the products and processes of applicants' claims in the absence of a showing of new or unexpected results.

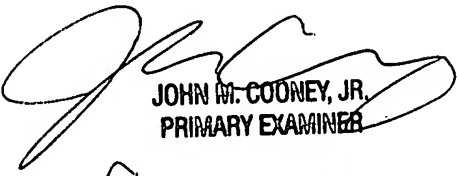
This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The above provisional rejections are maintained as set forth above. Applicants' suggested and intended address to these rejections is appropriate and acceptable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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